

In re of Appln No. 09/554,734

14 additional electrical connections between the coil antenna and the chip carrier  
15 module during or subsequent to assembly.

C1  
1 **2. (Amended)** The data transaction card according to Claim 1, further comprising:  
2 an optical visual authentication mark applied to the second side of the  
3 substrate, so as to remain visible after packaging into the chip carrier module and  
4 after assembly of the chip carrier module with the support.

C2  
1 **6. (Amended)** The data transaction card according to Claim 1, wherein the  
2 substrate further comprises:  
3 a contact field with separate contacts applied on the second side of the  
4 substrate, for contact communication between the data transaction card and a card  
5 reader.

C3  
1 **8. (Amended)** The data transaction card according to Claim 6, wherein  
2 the cavity is spatially disposed relative to the support so that when the  
3 chip carrier module is assembled on to the support, the contact field conforms to  
4 ISO 7816.

1 ~~14~~<sup>14</sup>. **(Amended)** The data transaction card according to Claim 1, wherein the coil  
2 antenna is applied on the first side of the substrate.

C4  
1 ~~14~~<sup>16</sup>. **(Amended)** The data transaction card according to Claim 1, wherein the coil  
2 antenna is applied on to the second side of the substrate, and is connected to the  
3 integrated circuit by electrical interconnections passing from the first side of the  
4 substrate to the second side thereof.

5 ~~12~~<sup>17</sup>. **(Amended)** The data transaction card according to Claim ~~10~~<sup>11</sup>, further  
6 comprising:  
7 a second coil antenna mounted on the second side of the substrate and  
8 being connected to the first coil antenna and to the integrated circuit by electrical  
9 interconnections passing from the first side of the substrate to the second side  
10 thereof.

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- 1 **18. (Twice amended)** A method for manufacturing a data transaction card, said  
2 method including the steps of:
- 3 (a) providing a support having a cavity therein,  
4 (b) independently producing a chip carrier module including a substrate  
5 having a coil antenna formed therein around an integrated circuit  
6 mounted on the substrate and connected via the substrate to the coil  
7 antenna, and  
8 (c) mounting the chip carrier module in the cavity of the support.

### REMARKS

The Examiner's comments have been carefully noted and the Examiner's acknowledgement that claims 2-5 recite allowable subject matter is noted with appreciation.

The Examiner rejected claims 1 and 6-18 under 35 U.S.C. §102(b) as being anticipated by Hakkers *et al.* (US Patent No. 5,428,214).

This rejection is respectfully traversed. Hakkers *et al.* does not describe the same approach as discussed in the application. Whilst it does also relate to a contactless transponder in the form of a card, it describes a quite different construction to that proposed by the invention and described in the application. Thus, Hakkers *et al.* discloses a contactless transponder comprising a coil antenna which is wound around a bobbin shown in exploded view in Fig. 2 of the patent. The bobbin comprises opposing end plates 10 and 11 which form the substrate of the transponder and are separated by a thin plate-shaped inner core 15 of oval shape and around which the coil antenna is wound. Note that all three components, i.e. the two end plates 10 and 11 as well as the inner core 15 are provided with a Z-shaped recess 17 for accommodating therein the electronic chip.

**It is apparent from this construction that the electronic chip is a separate component to the coil antenna itself and that, in manufacture, after**

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